

Darnell & ASSOCIATES, INC.

TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

MEMORANDUM

DATE: November 12, 2013

TO: Lisa Goodman-Mercurio, M&M Telecom, Inc.

FROM: Bill E. Darnell, Darnell & Associates, Inc. 

D&A Ref. No: 131006

RE: Corner Sight Distance Certification for Verizon 67 & Bradley (1681 Magnolia Avenue)
Access

Attached are the following:

1. Corner Sight Distance Certification Letter to be submitted to the County of San Diego;
2. Corner Sight Distance Report to be submitted to the County of San Diego;
3. SR-67 & Bradley (1681 Magnolia Avenue) Invoice

Darnell & ASSOCIATES, INC.

TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

November 12, 2013

County of San Diego
Department of Public Works, MS 0336
5201 Ruffin Road
San Diego, CA 92123

D&A Ref. No.: 131006

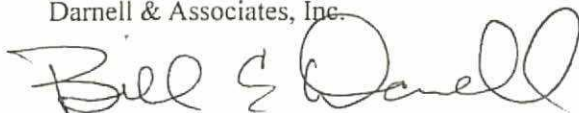
Subject: Sight Distance Certification for the Verizon - 67 & Bradley at 1681 North Magnolia Avenue
Wireless Telecommunication Facility Project. (PDS 2013-ZAP-13-003 & PDS 2013-ER-13-14-005)

I, Bill E. Darnell certify that physically there is 550 feet of unobstructed corner sight distance looking northerly and southerly on North Magnolia Avenue from the project access serving the project site in the El Cajon area of San Diego County. The unobstructed sight distance is based on the actual measured sight distance and the design speeds of 50 miles per hour per the Design Standards of Section 6.1F of the County of San Diego Public Road Standards (Approved March 3, 2010) and the California Department of Transportation criteria. The lines of sight fall within the existing street right of way and a clear space easement is not required. I further certify that the sight distance of adjacent driveways and street openings are not adversely affected by this project.

If you have any questions, please feel free to contact the office.

Sincerely,

Darnell & Associates, Inc.



Bill E. Darnell
P.E. Firm Principal
RCE: 22338



11/12/2013
Date

BED/jam

131006 - Verizon 67/Bradley Sight Distance Certification-Ltr (11/13)

Darnell & ASSOCIATES, INC.

TRANSPORTATION PLANNING & TRAFFIC ENGINEERING

November 12, 2013

Lisa Goodman-Mercurio
M&M Telecom, Inc.
6886 Mimosa Drive
Carlsbad, CA 92011

D&A Ref. No.: 131006

Subject: Verizon - 67 & Bradley Wireless Tele-Communication Facility Project located at 1681 North Magnolia Avenue, Certification of Access Corner Sight Distance. (PDS 2013-ZAP-13-003 & PDS 2013-ER-13-14-005)

Dear Ms. Goodman-Mercurio:

In accordance with your authorization, Darnell & Associates, Inc. (D&A) has completed the Corner Sight Distance assessment at the projects 1681 North Magnolia Avenue access. The project access is located on the eastside of North Magnolia Avenue North of Bradley Avenue. Figure 1 is a vicinity map showing the projects location and Figure 2 presents the projects site layout.

North Magnolia Avenue is designated as a 4.1D Major Roadway on the Mobility Element of the County of San Diego with a design speed of 55 miles per hour (mph). Presently North Magnolia Avenue is posted 40 mph and the Speed Surveys collected November 4, 2013 showed the 85th percentile speed to be 40 mph. Therefore the design speed of 55 mph was used to check Corner Sight Distance at the project access.

The County's Public Road Standards requires a minimum corner sight distance of 10 feet for every mile per hour based on the highest of either the design speed or prevailing speed of the roadway. Since the prevailing (85th percentile) speeds are lower than the design speed of 55 mph the design speeds were utilized to determine the corner sight distance requirement for the project access.

Field observations and measurement of Corner Sight Distance was conducted on November 10, 2013. Photos of available Corner Sight Distance were made looking North and South on North Magnolia Avenue from a height of 3½ feet above the project access and ten (10) feet from the edge line of North Magnolia Avenue looking at an object 3½ feet in height located in the center of the approaching travel lane.

The observation found a minimum of 550 feet which satisfies the County's requirements.

In summary the 550 feet of Corner Sight Distance can be certified as requested by the County of San Diego. The requested certification has been prepared and is included with this report

Lisa Goodman-Mercurio
M&M Telecom, Inc.
November 12, 2013
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If you have any questions, please feel free to contact the office.

Sincerely,

Darnell & Associates, Inc.



Bill E. Darnell, P.E.
Firm Principal
RCE 22338

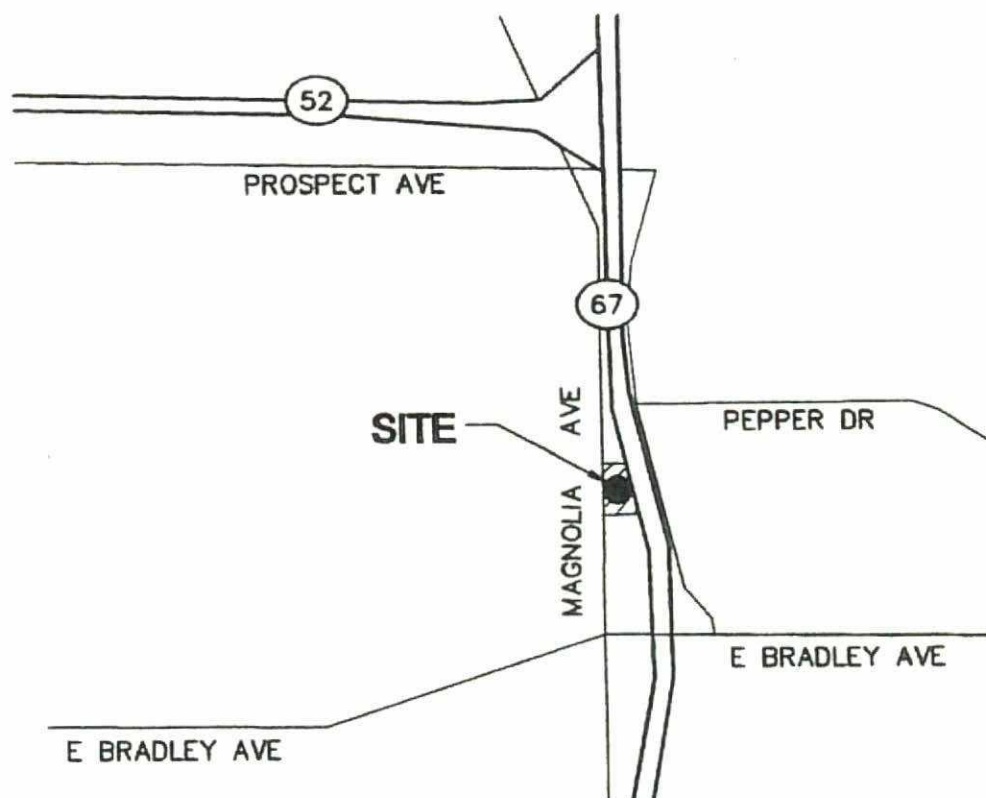


Date Signed: 11/12/2013

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131006 - Bradley and SR-67 Sight Distance Certification-ltr.doc

Attachments:

- Magnolia Avenue Speed Surveys
- Corner Sight Distance Photos



Darnell & ASSOCIATES, INC.

131006-SR67 -Bradley- AA.dwg 11-12-13

FIGURE 1
VICINITY MAP



ATTACHMENTS

- Speed Surveys
- Corner Sight Distance Photos

LOCATION: 1681 NORTH MAGNOLIA AVENUE NORTH OF BRADLEY

DATE: 11/4/13

POSTED SPEED LIMIT: 40
 85TH PERCENTILE SPEED: 40
 50TH PERCENTILE SPEED: 37
 AVERAGE SPEED: 37
 10 MPH PACE SPEED: 32-41

DIRECTION: SB
 WEATHER: DRY

START: 11:00 AM
 END: 12:00 PM (NOON)

NAME OF RECORDER: BILL E DARNELL
 TOTAL NUMBER OF VEHICLES: 112

SPEED MPH	NUMBER OF VEHICLES																													PERCENT OF TOTAL	CUMULATIVE PERCENT
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29		
60																													0	0.0%	100.0%
59																													0	0.0%	100.0%
58																													0	0.0%	100.0%
57																													0	0.0%	100.0%
56																													0	0.0%	100.0%
55																													0	0.0%	100.0%
54																													0	0.0%	100.0%
53																													0	0.0%	100.0%
52																													0	0.0%	100.0%
51																													0	0.0%	100.0%
50																													0	0.0%	100.0%
49																													0	0.0%	100.0%
48																													0	0.0%	100.0%
47																													0	0.0%	100.0%
46																													0	0.0%	100.0%
45																													0	0.0%	100.0%
44																													0	0.0%	100.0%
43	X																												1	0.9%	100.0%
42	X	X	X	X																									4	3.6%	99.1%
41	X	X	X	X	X	X																							6	5.4%	95.5%
40	X	X	X	X	X	X	X	X																					8	7.1%	90.2%
39	X	X	X	X	X	X	X	X																					8	7.1%	83.0%
38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X													16	14.3%	75.9%
37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X												17	15.2%	61.6%
36	X	X	X	X	X	X	X	X	X	X	X	X	X																13	11.6%	46.4%
35	X	X	X	X	X	X	X	X	X	X	X	X																	12	10.7%	34.8%
34	X	X	X	X	X	X	X	X	X	X																			10	8.9%	24.1%
33	X	X	X	X	X	X	X																						7	6.3%	15.2%
32	X	X	X	X	X																								5	4.5%	8.9%
31	X	X	X																										3	2.7%	4.5%
30	X	X																											2	1.8%	1.8%
29																													0	0.0%	0.0%
28																													0	0.0%	0.0%
27																													0	0.0%	0.0%
26																													0	0.0%	0.0%
25																													0	0.0%	0.0%
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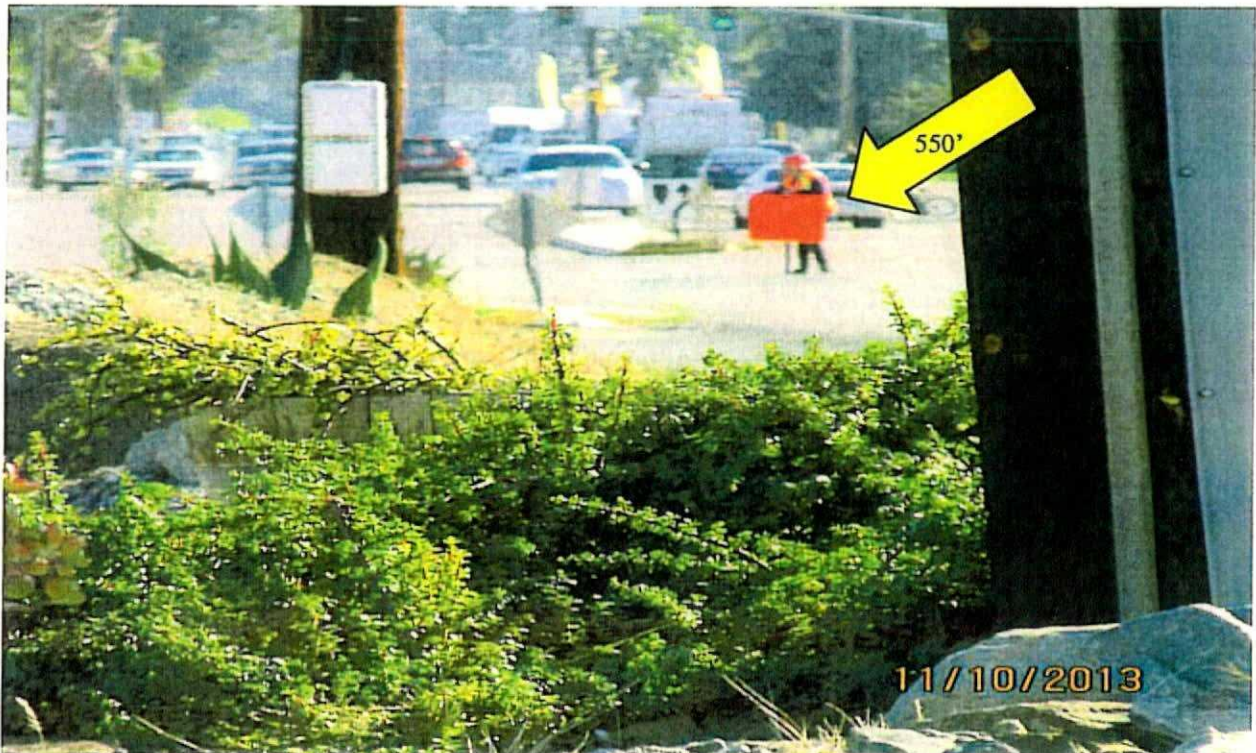
DATE: 11/4/13

START:	11:00 AM
END:	12:00 PM (NOON)

[illegible]



10' ft behind the Edge of the Road - Looking North on Magnolia Avenue, Corner Sight Distance of 550' Feet.



10' ft behind the Edge of the Road - Looking North on Magnolia Avenue, Corner Sight Distance of 550' Feet.